

Storm Water Utility

Mission. The mission of the Storm Water Utility is to construct, reconstruct, and maintain the City's storm water drainage system, including storm sewers, catch basins, streams, and drainage-ways, and ensure the City's compliance with water quality provisions of the National Pollutant Discharge Elimination System (NPDES) permit.

Overview. The Storm Water Utility is a division of the Public Works Department and is involved in all the City's drainage issues.

Storm Water maintenance crews clean and maintain 400 miles of storm sewers, 15,000 catch basins, and 130 miles of drainage ditches annually. Storm sewers are cleaned and televised to assess condition and repair needs. Catch basins are cleaned and repairs are made when needed. Erosion repairs are made to drainage ditches and banks are stabilized as required. A private vendor provides contractual mowing of ditches and drains.

	Major Service Levels			
	1998	1999	2000	2001
Miles of storm sewers cleaned	114	72	130	130
Number of inlets cleaned	36,065	40,872	45,000	45,000
Number of manholes & inlets repaired	133	241	300	300

The City has six pump stations that move excess water in times of heavy rains or flooding. The Utility is responsible for the operation and maintenance of the pump stations.

The Utility is responsible for the design and construction of projects approved in the Capital Improvement Program (CIP). The Utility also investigates drainage concerns from citizens and determines possible solutions. The \$400,000 annual "hot spots" (neighborhood drainage problems) budget is proposed to increase to \$605,000 in 2001 and 2002, to expedite the solution of these drainage problems.

The Utility drafted the Storm Water Pollution Prevention Ordinance, adopted by the City Council in December 1998, to aid the City in complying with NPDES regulations. The Utility provides NPDES compliance education, is responsible for all components of the City's drainage system, including the maintenance and cleaning of all streets, roads, and roadside ditches, and submits an annual report to the Kansas Department of Health and Environment (KDHE) documenting compliance with the NPDES permit.

The Utility monitors construction sites in the City to ensure compliance with the Storm Water Pollution Prevention Ordinance. All sites must use Best Management Practices (BMP) to ensure that erosion sediment or chemicals do not enter the drainage

system, increasing pollution in streams and rivers. Industrial sites in the City are monitored to ensure compliance. Water sampling and testing are used to show trends in amounts and types of pollutants present.

Departments that work or make inspections in and around the drainage system assist with enforcement of the ordinance. The Utility provides education and coordination with cooperating departments including Police, Fire, Central Inspection, Public Works, Park, and Health.

Finance and Operations. Storm Water Utility operations are funded with fees from property owners in the City. The fee is determined by the number of equivalent residential units (ERU).

One ERU is the average amount of impervious area (rooftops and pavement) for a typical residence. The fee for all single family dwellings is based on one ERU. Businesses and industrial site fees are based on the number of ERUs on the property. Each \$0.01 ERU represents about \$41,000 annually in revenue.

When the Utility was formed in 1993 the ERU rate was set at \$1.66 per month. ERU fee revenues were projected to cover basic maintenance of the storm drainage system, storm sewer rehabilitation, hot spot repairs, and capital drainage projects. In 1996 the ERU fee was reduced to \$1.21. The 27 percent decrease forced reductions in maintenance operations and capital projects originally planned for the Utility, including the loss of an inlet cleaning crew and associated equipment, seven seasonal positions, and the contracted inlet and stream rehabilitation program.

Expenditures are outpacing revenues, causing the fund balance to decrease each year. To maintain current operations without decreasing the fund balance further, the ERU was increased \$0.06 in 2000, for a total ERU of \$1.27. The additional revenue produced by the increase allows continuation of \$400,000 annual funding for the Hot Spots program. The ERU increase does not produce sufficient revenue to restore funding for storm sewer rehabilitation to address failing storm sewer lines in older neighborhoods.

Capital drainage improvements of \$1.5 million annually are funded over the next 10 years, with debt service payments budgeted in the Utility. The 2000-2009 CIP funds almost \$33 million in drainage system improvements from non-utility funds. Even with this significant commitment, over \$22 million in capital drainage projects are not funded. An ERU increase of \$0.03 is required to service each additional \$1 million in bonded debt.



The Wichita Drainage Canal in an unimproved state.



The Drainage Canal after being lined and enlarged. The outfall on the left is the recently completed 3rd Street Drainage/Greenway project. The volume of water in the channel is approximately equal in the two pictures.

Capital projects underway include enlarging the 10th Street drainage outfall, enlarging the Drainage Canal from English to 10th

Street, designing channel modifications in Cowskin Creek, developing a Cowskin Creek Basin master drainage plan, and designing improvements between Kellogg and 2nd Street west of the Arkansas River.

Federal Emergency Management Agency (FEMA) flood maps identifying the 100-year flood plain were last updated in 1986, thus, changes in the flood plain in the last fourteen years are not reflected in the maps. The 2000 budget splits the \$250,000 cost to update the maps between the Utility and the General Fund. After the FEMA maps are updated, the Utility will no longer provide free flood plain determinations, but institute a market-based service fee.

In 2001 and 2002, the ERU fee is increased \$0.05 to fund additional hot spot repairs including the intersections of Clara and Newell, Murdock and Wabash, 12th and Topeka, and Kellogg and Greenwich. Other projects include cleaning the North Wichita Industrial Drainage Ditch from 25th and Broadway to the Drainage Canal, improving Dry Creek drainage at George Washington Boulevard, and numerous smaller projects in newly annexed areas of Wichita, particularly in the far east and southwest areas.

Recent and future annexations challenge the Utility's resources for system maintenance. Maintenance of the growing infrastructure will eventually require additional personnel and equipment.

Revenue Summary (in thousands)				
	1998	1999	2000	2001
ERU fees	4,798	4,900	5,195	5,387
General Fund subsidy	515	515	515	515
Interest/other	245	363	367	163
Revenue - all sources	5,558	5,778	6,077	6,064

Storm Water Utility Budget Summary					
	1999 Actual	2000 Adopted	2000 Revised	2001 Adopted	2002 Approved
Storm Water Utility Revenue	5,777,912	5,970,010	6,076,590	6,064,040	6,078,750
Personal Services	1,386,768	1,529,390	1,420,750	1,531,610	1,599,760
Contractual Services	1,416,185	1,105,860	1,150,400	967,070	980,200
Commodities	175,037	211,890	211,890	211,890	211,890
Capital Outlay	9,536	202,100	227,100	192,100	13,000
Other	2,263,864	3,185,500	7,988,480	3,533,270	3,079,710
Total Storm Water Utility Expenditures	5,251,390	6,234,740	10,998,620	6,435,940	5,884,560
Reserve	0	0	650,000	0	0
Revenue Over (Under) Expenditures	526,522	(264,730)	(5,572,030)	(371,900)	194,190
Storm Water Utility Fund Balance	6,048,827	3,762,105	476,797	104,897	299,087
Position Summary					
Total full-time	37	37	37	37	37
Total part-time	0	0	0	0	0
Total FTE	37	37	37	37	37